

## REMARKS

Claims 13, 15, and 17 have been rejected under 35 U.S.C. 102 (e) as being anticipated by Shim *et al.* (U.S. Patent No. 6,683,377). Claims 14 and 17 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Shim, in view of Moon (U.S. Published Application No. 2002/0030975). Claim 18 has been rejected under U.S.C. 103(a) as being unpatentable over Shim, in view of Emoto (U.S. Patent No. 6,441,476).

Amended Claim 13 is patentable over Shim *et al.* by calling for at least one of said conductive traces is embedded in dielectric material in said multi-layer connection circuit so as to form a transmission line having a characteristic impedance. Such a transmission line having a characteristic impedance is described in Applicant's specification in reference to FIGS. 34 and 35. With reference to copper wires described by Shim *et al.* the Examiner asserts "copper is a material having a characteristically low impedance". However, a "transmission line" and "characteristic impedance" can be specifically defined. See for example the 7<sup>th</sup> edition of The Authoritative Dictionary of IEEE Standards Terms which provides the following definitions:

Characteristic Impedance (1) (A) (data transmission) (two-conductor transmission line for a traveling transverse electro-magnetic wave).

"The ratio of the complex voltage between the conductors to the complex current on the conductors in the same transverse plane with the sign so chosen that the real part is positive."

Transmission Line (1) (A) (data transmission) (signal-transmission system)

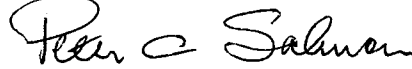
"The conductive connections between system elements which carry signal power; a waveguide consisting of two or more conductors."

Original Claim 17 and amended Claim 18 depend from Claim 13 and are patentable for the same reasons as Claim 13 and by reason of the additional limitations called for therein.

In view of the foregoing, it is respectfully submitted that the claims of record are allowable and that the application should be passed to issue. Should the Examiner believe that the application is not in a condition for allowance and that a telephone interview would help

further prosecution of this case, the Examiner is requested to contact the undersigned attorney at the phone number below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Peter C. Salmon". The signature is fluid and cursive, with the first name "Peter" and last name "Salmon" clearly distinguishable.

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